

Work Order ID 59584



Page 1

Tuesday, June 08, 2010 11:31:29 AM

Item ID: D105-674-011G

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube, Grey

Start Date: 6/8/2010 Start Qty: 1.00



Cust Item ID:

Required Date: 6/17/2010 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: H Date: 10-6-08 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2966	Rev A2								

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D105-674-011G

CHG002

Solo 6/30

110

0.00



Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-Determine square end of tube and deburr
2-Drill #30 pilot holes using DT8678. Open holes to Ø5/16" (0.313"). Deburr holes.

DD

10-6-10

120

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

Bend tube as per program BO105 on CNC Bender and Dwg D2966 as per folio 1

DD

10-6-10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

0.00



Skidtubes

Skidtubes

Memo

0.00

- 1-Cut Fwd end of the tube using DT8185-1
- 2-Cut Aft end at 107.06" using DT8185D
- 3-Deburr ends
- 4-Drill Aft Cap holes using DT8678
- 5-Locate DT8679 with 1/8 clecos in Aft Cap holes. Ensure DT8679 is centered on Fwd end of tube and drill #40 Fwd bushing.
- 6-Clamp DT8679 to the tube. Drill all #30 wearplate and crossbolt holes.
- 7-Open Aft Cap holes using #6 drill
- 8-Open wearplate holes and two side holes to Ø19/64" (0.297") as per Dwg D2966-1.
- 9-Deburr holes.
- 10-Open remaining (16) crossbolt holes to Ø0.500

140

0.00



Skidtubes

Skidtubes

Memo

0.00

- 1-Weld Fwd Cap as per Dwg D2966 and QSI 004. Fill #40 Fwd cleco hole.
- 2-Grind Fwd Cap welds flush

A/R M114242
10/6/15

BE 10/06/14

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Setup Start

Stop

Run Start

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

QC10- Inspect visual per QS1004- ground welds

0.00

8/10/6/15



QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00

8/10/6/15



QC

Memo

0.00

Quality Control

170

Chemical Conversion Coat per QS1005 4.1

0.00



HandFinish

Memo

0.00

Hand Finishing

DP

10-6-15

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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Run Start
Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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180 QC3- Inspect Part Finish 0.00

QC

Memo

0.00

Quality Control

1 M 6/6/10

190 Skidtubes 0.00

Skidtubes

Memo

0.00

Skidtubes

1-Open crossbolt holes to finish size as per Dwg D2966
2-Open 14 holes to Ø0.750" & 2 holes to Ø0.875", countersink crossbolt holes &
remove alodine to prepare for welding as per Dwg D2966
3-Deburr holes inside & outside, blow out chips

1 M 6/6/10

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES						
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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200

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Bond Web in place per QSI 015. (Ensure holes line up)

Pick:

Qty ☐ Part Numbe ☐ Description ☐ Batch

A/R ☐ Sikaflex-291 ☐ B-113519

Sikaflex expiry date: ☐ 11/2010

AA

Start time: 11:45AM 10-06-17 MB
End time: 9:00 AM 10-06-18 MB

2-Weld Crossbolt Spacers as per Dwg D2966 and QSI 004. For crossbolt spacer, weld one side, pass 5/8" drill; weld other side, pass 5/8" drill.

Pick:

Qty ☐ Part Number ☐ Description ☐ Batch

A/R ☐ Aluminum Rod ☐ m114242

BE 10/06/21

3-Pass Ø0.630" drill to remove spillover for D2973 crossbolt. Pass Ø0.750" drill to remove spillover for D2971 crossbolt.

BE 10/06/21

4-Grind welds flush as per Dwg D2966

AW M 10-06-21

210

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

Sub 10/06/21

Ⓢ

W/O:		WORK ORDER CHANGES						
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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W/O: 59584		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
10/06/25	221	Reploding as per PAR 09-043	JH	10/06/25	1		

Part No: D105-674-011G PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

Stop

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

250



HandFinish

Hand Finishing

HandFinishing

Memo

✓ 1-Inspect for foreign objects as per QSI 024

✓ 2-Install Inserts, Wearplate and Cap per Dwg D2966. Insert a drop of sikaflex at insert holes before installing wearplates. Seal Aft Cap using Sikaflex. Install bushing and nut. By looking Fwd, install nut to right hand side.

Pick:

✓ Qty ☐ Part Number ☐ Description ☐ Batch
A/R ☐ Sikaflex-291 ☐ 12114093
Sikaflex expiry date: ☐ 10/17

✓ 3-Wing Walk as per Dwg D2966 and QSI 005 4.4

Batch: M114432

0.00

0.00

0.00

0.00

260



QC

Quality Control

QC3- Inspect Part Finish

Memo

⇒ M 10/06/29

⇒ M 10/06/29

1 0

1 0

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Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 	QC5- Inspect part completeness to step on W/O	0.00							
QC Quality Control	Memo *****ENSURE INSERT ARE AT LOCATION (6) AS PER DWG D2966*****	0.00				<i>ml</i>	<i>10</i>	<i>06</i>	<i>30 (1)</i>
280 	Pick Kit	0.00							
Packaging Packaging	Memo	0.00				<i>16.6</i>	<i>30</i>	<i>sf</i>	
290 	QC4- 100% Inspect kits for completeness	0.00							
QC Quality Control	Memo	0.00				<i>8</i>	<i>06/30</i>		

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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300

0.00



Packaging

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D105-674-011G
Location: 88

Reva

10-6-3081

310

0.00



QC

QC21- Final Inspection - Work Order Release

Memo

0.00

Quality Control

10/07/01

U 10.07.01

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 1

Work Order ID: 59584

Parent Item: D105-674-011G

Parent Item Name: Skidtube, Grey






Comments: IPP Rev:A 04.07.07 New Issue KJ/JLM

Start Date: 6/8/2010

Required Date: 6/17/2010

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2962-125  Outer Tube Extrusion		Manufactured	No			110	Each	30.0000	1	1			
<div> <div>Location</div> <div>HALL</div> <div>17532</div> </div> <div> <div>Loc Qty</div> <div>30</div> <div>30</div> </div> <div> <div>Loc Code</div> </div>													
D2964  Cap		Manufactured	No			140	Each	23.0000	1	1			
<div> <div>Location</div> <div>LG</div> <div>14101</div> </div> <div> <div>Loc Qty</div> <div>23</div> <div>23</div> </div> <div> <div>Loc Code</div> </div>													
D2976  BO 105 Skidtube I Beam		Manufactured	No			200	Each	0.0000	1	1			
D2971  Cross Bolt Spacer		Manufactured	No			200	Each	31.0000	1	1			
<div> <div>Location</div> <div>LG</div> <div>44445</div> </div> <div> <div>Loc Qty</div> <div>31</div> <div>31</div> </div> <div> <div>Loc Code</div> </div>													
D2973  Cross Bolt Spacer		Manufactured	No			200	Each	180.0000	7	7			
<div> <div>Location</div> <div>LG</div> <div>14636</div> </div> <div> <div>Loc Qty</div> <div>180</div> <div>180</div> </div> <div> <div>Loc Code</div> </div>													

DP 10-6-9

BE 10/06/14
B-59883 MB 10/06-14

BE 10/06/21

7 BE 10/06/21

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Comments: IPP Rev:A ☐ 04.07.07 ☐ New Issue ☐ KJ/JLM

Start Date: 6/8/2010

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Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2965  Cap, 105 Skidtube		Manufactured	No			250	Each	49.0000	1	1			
<div> <div>Location</div> <div>FP4</div> <div>52057</div> </div> <div> <div>Loc Qty</div> <div>49</div> <div>49</div> </div> <div> <div>Loc Code</div> <div>1360161</div> </div> <div> <div>Qty</div> <div>1</div> </div> <div> <div>Date</div> <div>10/06/29</div> </div>													
D2970-1  Wearplate		Manufactured	No			250	Each	23.0000	1	1			
<div> <div>Location</div> <div>FP</div> <div>43726</div> <div>48213</div> </div> <div> <div>Loc Qty</div> <div>23</div> <div>7</div> <div>16</div> </div> <div> <div>Loc Code</div> <div></div> </div> <div> <div>Qty</div> <div>1</div> </div> <div> <div>Date</div> <div>10/06/29</div> </div>													
D2970-3  Wearplate		Manufactured	No			250	Each	16.0000	1	1			
<div> <div>Location</div> <div>FP</div> <div>48214</div> </div> <div> <div>Loc Qty</div> <div>16</div> <div>16</div> </div> <div> <div>Loc Code</div> <div></div> </div> <div> <div>Qty</div> <div>1</div> </div> <div> <div>Date</div> <div>10/06/29</div> </div>													
D3176-1  Bushing		Manufactured	No			250	Each	15.0000	1	1			
<div> <div>Location</div> <div>ST041</div> <div>37586</div> </div> <div> <div>Loc Qty</div> <div>15</div> <div>15</div> </div> <div> <div>Loc Code</div> <div></div> </div> <div> <div>Qty</div> <div>1</div> </div> <div> <div>Date</div> <div>10/06/29</div> </div>													

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Parent Item Name: Skidtube, Grey





Comments: IPP Rev:A 04.07.07 New Issue KJ/JLM

Start Date: 6/8/2010

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Start Qty: 1.00

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3176-3  Nut		Manufactured	No			250	Each	23.0000	1	1			
<div> <div>Location</div> <div>ST041</div> <div>37585</div> <div>44896</div> </div> <div> <div>Loc Qty</div> <div>23</div> <div>3</div> <div>20</div> </div> <div> <div>Loc Code</div> </div>													
ALS7-1032-130  Insert		Purchased	No			250	Each	17.0000	36	36			
<div> <div>Location</div> <div>ST282</div> <div>113238</div> </div> <div> <div>Loc Qty</div> <div>17</div> <div>17</div> </div> <div> <div>Loc Code</div> <div>11114723</div> </div>													
MS27039-1-08  Screw		Purchased	No			250	Each	1,481.000	26	26			
<div> <div>Location</div> <div>ST291</div> <div>110552</div> <div>110835</div> <div>114718</div> </div> <div> <div>Loc Qty</div> <div>1481</div> <div>44</div> <div>1237</div> <div>200</div> </div> <div> <div>Loc Code</div> </div>													
AN960JD10L  Washer	NAS1149D0332J	Purchased	No			250	Each	3,795.000	28	28			
<div> <div>Location</div> <div>ST348</div> <div>110988</div> </div> <div> <div>Loc Qty</div> <div>3795</div> <div>3795</div> </div> <div> <div>Loc Code</div> </div>													

x1 44 10/06/29

v36 44 10/06/29

x26 44 10/06/29

x28 44 10/06/29

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Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS27039-1-09		Purchased	No			250	Each	455.0000	2	2			
													
Screw													

Location Loc Qty Loc Code

ST291 455
111650 420
8057 35

Manufactured No

290 Each 111.0000

2 10/06/29

6 10-6-30

Location Loc Qty Loc Code

ST032 111
33544 80
44160 31

Manufactured No

290 Each 7.0000

6

1 10-6-30

Location Loc Qty Loc Code

ST032 7
42715 7

Manufactured No

290 Each 11.0000


1

2 10-6-30

Location Loc Qty Loc Code

ST497A 11
41443 1
44894 10

2

D2972

Bushing

D2974

Packer

D2975

Wearshoe

Tuesday, June 08, 2010 11:31:34 AM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector	
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Picklist Print

Tuesday, June 08, 2010 11:31:34 AM

Work Order ID: 59584



Parent Item: D105-674-011G



Parent Item Name: Skidtube, Grey

Start Date: 6/8/2010

Required Date: 6/17/2010

Comments: IPP Rev:A 04.07.07 New Issue KJ/JLM

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
AN4-51A Bolt		Purchased	No			290	Each	24.0000	3	3			
											M114941 10-6-3020		

Location	Loc Qty	Loc Code
ST361	24	
112720	2	
113121	1	
114495	21	

AN960JD10L

Washer

NAS1149D0332J

Purchased

No

290

Each

3,795.000

28

8



10-6-3020

Location	Loc Qty	Loc Code
ST348	3795	
110985	3795	

MS21042L4

Nut

Purchased

No

290

Each

3,972.000

3

3



10-6-3020

Location	Loc Qty	Loc Code
ST139	2	
111827	2	
ST300	3970	
113422	68	
114523	894	
114718	1000	
114784	2000	
9063	8	

3

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Pieclist Print

Page 6

Tuesday, June 08, 2010 11:31:34 AM

Work Order ID: 59584



Parent Item: D105-674-011G



Parent Item Name: Skidtube, Grey

Start Date: 6/8/2010

Required Date: 6/17/2010

Comments: IPP Rev:A 04.07.07 New Issue KJ/JLM

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS27039-1-08 Screw		Purchased	No			290	Each	1,481.000	26	8			
											10-6-30	sf	

Location

Loc Qty

Loc Code

ST291

1481

110552

44

110835

1237

114718

200

Tuesday, June 08, 2010 11:31:34 AM

Shop Packet Print

Page 6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN RF	DRAWN BY RF	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED #	APPROVED #	DRAWING NO. D2966	REV. A SHEET 1 OF 2
DATE 00.03.08		TITLE B0 105 SKIDTUBE ASSEMBLY	SCALE NTS
A	00.03.08	NEW ISSUE	

RELEASED
00.05.11 #

Qty	Part Number	Description
X	D2966-041	SKIDTUBE ASSEMBLY
1	D2962-125	EXTRUSION
1	D2964	CAP
1	D2965	CAP
1	D2970-1	WEARPLATE
1	D2970-3	WEARPLATE
1	D2971	CROSS BOLT SPACER
7	D2973	CROSS BOLT SPACER
1	D2976	WEB
36	ALS7-1032-130 or ALS4-1032-130 or AKS7-1032-130 or AKS4-1032-130	INSERT
28	AN960JD10L	WASHER
26	MS27039-1-08	SCREW
2	MS27039-1-09	SCREW
1	D3176-1	BUSHING
1	D3176-3	NUT

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHIN 30 DAYS
WORK ORDER
NO. 39589
BS-0-6-08



GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) WELDING TO BE DONE PER DART QSI 004.
- 3) INSERT D2976 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015 AFTER BENDING.
- 4) USE DART DRILL TEMPLATE DT8451 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION B-B (34 PLACES) AFTER FINISH. SEAL WEARPLATE SCREWS WITH SIKAFLEX-241/-291.
- 5) DO NOT INSTALL MS27039-1-08 SCREWS AND AN960JD10L WASHERS IN THESE LOCATIONS.
- 6) INSTALL ALS7-1032-130 INSERT, MS27039-1-08 SCREW, AND AN960JD10L WASHER IN 2 PLACES THIS LOCATION BEFORE POWDER COATING.
- 7) FINISH:
ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2976 WEB
POWDER COAT ASSEMBLY GLOSS WHITE (REF 4.3.6.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.00 ABOVE CENTER LINE PER DART QSI 005 4.4 (OPTIONAL) — BLACK SANDTEX (REF 4.3.5.7)



01.01.29
01.01.30

A2	02.10.30	ADD D3176-1/-3	# UP
A1	01.01.29	CHANGE COLOR TO BLACK SANDTEX	# UP

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W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

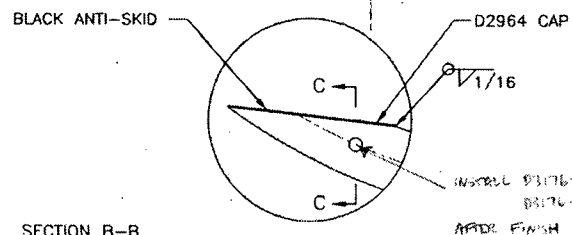
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

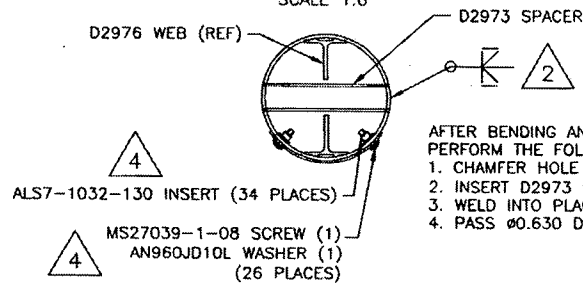
NOTE: Date & initial all entries

w/o 39584

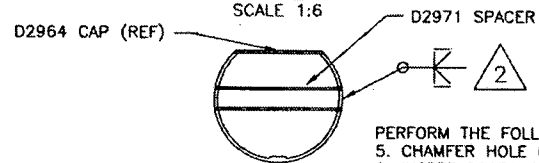
DETAIL A
SCALE 1:3



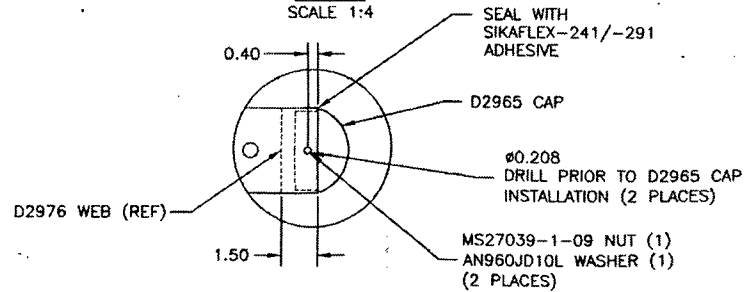
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SCALE 1:6



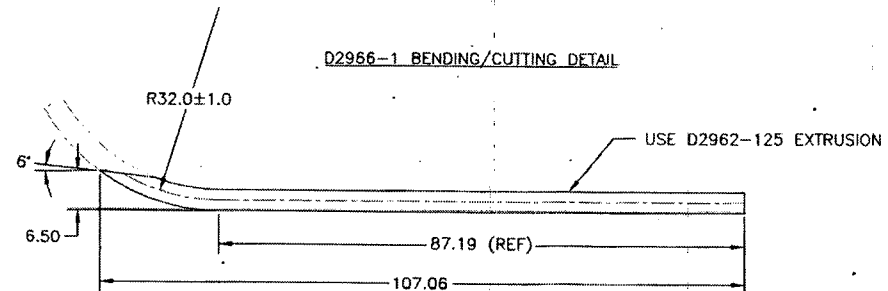
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SCALE 1:6



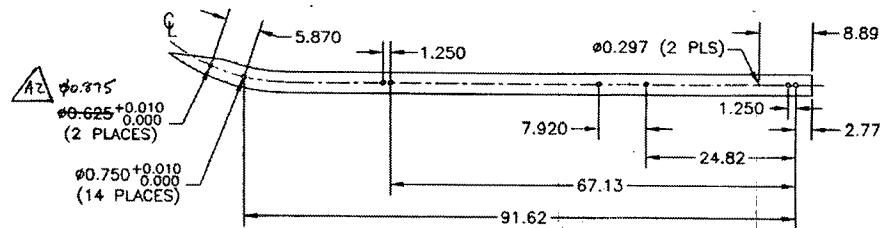
DETAIL D
SCALE 1:4



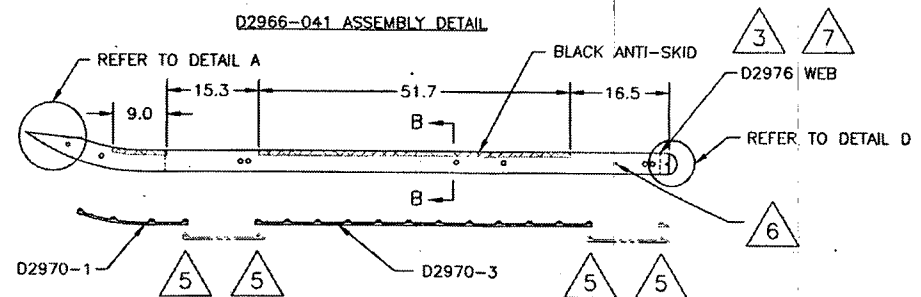
D2966-1 BENDING/CUTTING DETAIL



D2966-1 DRILLING DETAIL



D2966-041 ASSEMBLY DETAIL



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DESIGN RF	DRAWN BY RF	DART DART AEROSPACE USA, INC. BELLEVUE, WA
CHECKED #	APPROVED #	DRAWING NO. D2966
DATE 00.03.08		REV. A SHEET 2 OF 2
		TITLE BQ 105 SKIDTUBE ASSEMBLY
		SCALE 1:20

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

NO. 192

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Bardley Elliot
Job number: 44849
Part number: D105 674 011 WC
Description: BO 105
Welding Process: Tig[☒] Mig[]
Base material: Aluminium
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual:
Penetration:

pass[☒] fail[]
pass[☒] fail[]

UNACCEPTABLE

Cracks:
Undercut:
Pin holes:
Overlap (cold lap)
Porosity (surface):
Coloration:

pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]
pass[☒] fail[]

Qualifier Pet Duvel

Date of Test Coupon 09.02.05

Welder Bardley Elliot

Date of Test Coupon 09.02.05

The above named individual is qualified in accordance with AWS D17.1.2001 to weld